LITHIC ARTIFACTS

Introduction

A number of lithic artifacts were recovered from the excavations at 31SK15. These artifacts include chipped stone artifacts (debitage, cores, flake tools, projectile points, knives, and cobble tools), carved or ground stone artifacts (celts, hammerstones, steatite sherds), and other stone objects that include ground stone disks. Table 5 demonstrates the frequencies of the stone artifacts recovered from 31SK15.

Table 5: Frequency of Stone Artifact Types.

Artifact Type	Frequency	Percent
Primary Decortication Flake	13	0.49
Secondary Decortication Flake	43	1.62
Interior Flake	2052	77.14
Bifacial Thinning Flake	21	0.79
Shatter Fragment	377	14.17
Utilized/Retouched Flake	5	0.19
Flake Tool	10	0.37
Core	24	0.90
Triangular Projectile Points	12	0.45
Other Projectile Points/Knives	5	0.19
Biface Fragments	4	0.15
Cobble Tool	3	0.11
Ground Stone Tool	1	0.04
Steatite Sherd	2	0.08
Fire-Cracked Rocks	88	3.31
Total	2660	100.00

Chipped Stone Artifacts

Debitage: Flakes and shatter fragments from core reduction and tool manufacture are the most common stone artifact classes recovered from 31SK15. Unmodified flakes account for 80 percent of all lithic artifacts. The complete reduction sequence is represented in the assemblage, but the latter stages of the reduction process, represented by interior and bifacial thinning flakes, account for the overwhelming majority of debitage (N=2,077, %=85). Most interior flakes are very small, less than 6.5 mm (.25 in) in diameter and were collected from waterscreened samples. Vein quartz is the most common raw material found in the debitage, accounting for 89 percent of all flakes and shatter fragments. Metavolcanic rock is the second most common raw material type (N=142), including 5 identifiable pieces of rhyolite, one of which looks like Morrow Mountain flow-banded rhyolite. Fine-grained and cryptocrystalline rocks like chert (N=53), fine-grained quartz (N=25), and jasper (N=6) are also well represented in the assemblage. Quartzite (N=36) and crystal quartz (N=8) account for the remainder of the debitage assemblage.

Cores: A total of 24 cores have been identified in the stone artifacts from 31SK15. Twenty of the cores are vein quartz, two are crystal quartz, and there is one each of quartzite and chert. All but one core are random cores, meaning the flakes were not removed in a systematic way, but were struck from random directions. One quartzite cobble core has flakes removed from the lateral edge, creating the appearance of a polyhedral core (Figure 103).

Flake Tools: Very few stone tools or modified flakes were recovered and no formalized chipped stone tools besides projectile points were identified. Expedient flake tools including piecès esquillées (N=5), gravers (N=2), a denticulate, a scraper, and a spokeshave were recovered from the site. Four utilized flakes and one retouched flake were also identified.

Projectile Points/Knives: A total of 12 triangular projectile points were recovered from 31SK15 (Figure 104). The length of the points ranges from 12 mm to 31 mm with a median value of 21 mm. The width of the points ranges from 9 mm to 19 mm with a median value of 13.5 mm. These points were made from a variety of raw materials including vein quartz (N= 5), rhyolite (N= 2), unidentified metavolcanic (N= 3), tuff (N= 1), and chert (N= 1).

Other projectile points in the assemblage include one bifurcated point that is probably a LeCroy, though it is larger than the published size range for the type (Broyles 1971; Chapman 1977). This point is made of fine-grained quartzite and was recovered from Zone 2 or 3 of unit W119.5-W123.6. A fragment of a somewhat small, stemmed projectile point was also recovered from this context. The stem and the distal end of the blade are broken. This point/knife is made of rhyolite and may represent a Late Archaic Small Stemmed type, but it is too fragmentary to make a clear determination. Three other small fragments of projectile point/knife forms were present. Four biface fragments were also recovered.

Cobble Tools: Two crudely flaked chopper/scraper implements were present in the assemblage. One chopper was made from a quartzite cobble. The other crude chopper was made from a mass of metavolcanic rock, possibly diorite.

Carved or Ground Stone Artifacts

Ground Stone Tools: The only formal ground stone tool was the poll of a greenstone celt from Feature 16 (Figure 105). The poll of the celt was battered and broken, and the bit end was broken and missing.

The groundstone celt found in Feature 16 (Zone 2, Level 5) was broken, but appears to be at least 50 percent intact. It is 5.5 cm across at the widest point, at least 9.0 cm long, and at least 3.0 cm thick. It was probably no longer than 15.0 cm and was oval in cross section. Celts tended to decrease in length through time, with those from the historic period rarely exceeding 10 cm in length. At Town Creek, Coe found that the Yadkin celts ranged from 20 to 30 cm and were oval in cross section while the later Pee Dee celts were only 10 to 16 cm and slightly rounded or flat in cross section (Coe 1995:213). Coe had earlier noted the same trend at the Gaston site, where Gaston period celts were smaller, and thin and rectangular in cross section compared to the earlier Clements period celts, which were larger, and thick and oval in cross section (Coe 1964:114).

Holland also identified two sizes of celts in southwestern Virginia (1970:97). The larger celts ranged from 10.0 to 12.5 cm in length, and average 5.4 cm in width at the bit, while the smaller celts' lengths were unknown as there were only fragments, and the bit widths averaged 2.7 cm. The thicknesses were 2.3 cm for the larger celts versus 1.4 cm for the smaller ones. He identifies the smaller celts with the Dallas component (Mississippian) in Tennessee and the larger celts with Hamilton (Woodland) and Dallas components of Hiwassee Island in Tennessee. Greenstone was the predominant material.

A groundstone celt from Lower Sauratown was 10.2 cm long, 5.3 cm wide at the bit, and 3 cm thick. It was associated with the Dan River phase (Ward and Davis 1993:202). The Jenrette site yielded a broken celt 3.3 cm wide, 2.1 cm thick, and at least 6.8 cm long. The site is in the Eno drainage and has Late Prehistoric and Middle Contact period components (Ward and Davis 1993:363).

Whole celts found at the Dan River phase Belmont site in Henry County, Virginia, ranged in length from 7.06 to 13.58 cm. Seven of the eight specimens were triangular, and the eighth was rectangular (Davis et al. 1997b).

The Box Plant site, another Dan River phase site in Henry County, produced four whole celts. Two of these were triangular and two were rectangular. They ranged in length from 10.8 to 17.4 cm. Maximum thickness ranged from 1.0 to 3.5 cm (Davis et al. 1997a).

Based on comparison, the celt from Feature 16 is probably from the Middle or Late Woodland periods. If this is the case, the item may have been an heirloom curated by the inhabitants of site 31SK15.

Hammerstone: One hammerstone, consisting of three refitting fragments (two large fragments and a flake), was recovered from Feature 16. This quartzite cobble exhibited crushed areas along its margin representative of its use during lithic reduction.

Steatite Sherds: Two small fragments of carved steatite vessels were identified in this collection.

Other Stone Objects

Possible Ground Stone Disks: This assemblage contained two pieces of schist that were roughly circular and worn along the edge (one is shown in Figure 101). These may represent crude gaming disks, but may also simply be naturally worn, circular fragments.

Unmodified Rocks and Washings: Unmodified rocks and bags of sorted washings were noted when present, but were not quantified.